

Ms. Marlene Dortch
Secretary, Federal Communications Commission
The Portals, 445 12th Street SW, Washington DC 20554
September 14, 2016

Docket 15-91, Wireless Emergency Alerts

Dear Ms. Dortch:

On September 13, 2016, Keith Kaczmarek, inPhase Wireless and I, John Carley, Director Product Management, location.io Rx Networks, spoke with James Wiley, Attorney Advisor in the Policy and Licensing Division of the Public Safety and Homeland Security Bureau. The purpose of the meeting was to discuss incorporating the location capabilities of the handset into the existing WEA service, and how that can, and should, be done in a way that does not burden the carriers' networks.

Specifically, I gave an overview of RX Networks, a mobile positioning technology company that runs the world's leading source of GPS, GLONASS, BeiDou or Galileo real-time assistance data service used by mobile carriers across the globe, and stated that we provide services to over 1 billion devices.

The participants discussed the fact that most smartphones utilize predictive data for geolocation (referred to as Extended Ephemeris) which is valid for 7-14 days and greatly enhances the time-to-first-fix (TTFF). With predictive data the device is able to determine its location in 5 – 15 seconds, without predictive data it could take 45 – 60 seconds. There are two approaches to positioning – device-based and network-based. Devices can be setup to only use “device-based” geolocation, thereby lessening the potential burden on the carriers' networks. We discussed that fact that there is no need to send location from handset to the network to support device-based WEA. The participants discussed the fact that services like Glympse, Yelp and others use location services located on the device.

Additionally, there was a discussion around when a device wakes up (or was in a location that it couldn't get a fix), it would start on the map with lower accuracy (the big blue circle as you would see on a map), but then accuracy improves in seconds (the circle gets smaller) as the “confidence” goes up. This confidence level could be utilized to determine whether to play or don't play the message.

As part of the WEA service, alert originators could modulate accuracy versus latency, based on the type of emergency and the need to deliver the information immediately. The parties discussed the belief that using the mobile device for geo-location and confidence level will be the most efficient way to deliver the WEA message.

Please don't hesitate to contact me if you have any questions.

Sincerely,

/s/

John Carley
Director Product Management, location.io